

Annual Drinking Water Quality Report

EASTERN REGION ALLEGANY DISTRIBUTION CENTER

MD001-0005 Eastern Region (Cumberland)

Annual Water Quality Report for the period of January 1 to December 31, 2016

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The source of the drinking water used by
EASTERN REGION ALLEGANY DISTRIBUTION SYSTEM is purchased Surface Water.

For more information regarding this report contact:

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301-777-5933 ext. 209

Source of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

Radioactive contaminants which can be naturally occurring or be the result of oil and gas production and mining activities.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA'S Safe Drinking Water Hotline at (800)-426-4791.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population.

Immuno-compromised persons such as persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDs or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant woman and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about the lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Source Water Information

Source Water Name	Type of Water	Report Status	Location
CC-MD0010008-TPO1	PURCHASED-MD0010008 SW	SW	N

Also see City of Cumberland Water Quality Report

2016 Regulated Contaminants Detected

Water Quality Test Results

Maximum Contaminant Level Goal or MCLG:	The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
Maximum Contaminant Level or MCL:	The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
Maximum residual disinfectant level goal or MRDLG:	The level of a drinking water disinfectant below which there is no known or expected risk to health, MRDLGs do not reflect the benefits to the use of disinfectants for control of microbial contaminants.
Maximum residual disinfectant level or MRDL:	The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Avg.:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
ppm:	milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
ppb:	micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
na:	not applicable
Definitions:	The following tables contain scientific terms and measures, some of which may require explanation.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine		0.01	0-0.1	MRDLG=4	MRDL=4	ppm	N	Water additive used to control microbes.

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

Haloacetic Acids

(HAAS)*	40	0-45.8	No goal for the total	60	ppb	N	By-product of drinking water disinfection
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Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

Total Trihalomethanes (TTHM)	50	25.31-60.1	No goal for the total	80	ppb	N	By-product of drinking water disinfection
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Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

What You Should Know About Your Drinking Water Supply

Published by the City of Cumberland – Utilities Division

2017 Water Quality Report

Maryland Public Water Service Identification Number – 0010008

Pennsylvania Public Water Service Identification Number - 4050028

In Accordance with the U.S. Environmental Protection Agency

National Primary Drinking Water Regulation 40 CFR 141

Introduction: The City of Cumberland is pleased to present to you this year's Annual Water Quality Report detailing all contaminant information collected between January 1 and December 31, 2016. The report is designed to inform you about the quality water services delivered to you every day. Our goal is to provide you with a safe and dependable drinking water supply. We want you to be aware of the efforts we make to continually improve the water treatment process and to protect our water resources. The City of Cumberland analyzes its drinking water for all parameters outlined in the National Primary Drinking Water Regulation: Consumer Confidence Report 40 CFR 141 unless a waiver has been granted by Maryland Department of the Environment and/or Pennsylvania Department of Environmental Protection. The City also analyzes for many unregulated chemical compounds. Parameters and compounds that were detected in treated water over the calendar year are displayed in the **2016 Water Quality Data Chart**.

Where Does Your Drinking Water Originate: The water for the City of Cumberland is surface water originating from the Lake Koon and Gordon reservoirs located in the Cumberland Valley Township, Bedford County, Pennsylvania. The primary tributaries supplying water to the reservoirs are Evitts Creek, Growden Run, Oster Run as well as several unnamed tributaries.

Water Treatment: Surface water treatment facilities like Cumberland's are designed and operated to take a raw water source of variable quality and produce consistent high quality drinking water. Multiple treatment processes are provided in series and each process represents a barrier to prevent the passage of particulate matter, cysts and other microbial contaminants. Our Water Treatment Facility utilizes barriers which include clarification, filtration, and disinfection.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In accordance with the Drinking Water Act Amendments, Maryland Department of the Environment and Pennsylvania Department of Environmental Protection has prepared a **Source Water Assessment Plan** for the Evitts Creek Watershed. The Plan evaluates the existing land use and water quality conditions, describes potential contamination threats as well as providing background to support ongoing efforts to protect the watershed through the Evitts Creek Steering Committee (ECSC). The ECSC meets on a quarterly basis. Contact the Cumberland Engineering Division at 301-759-6604 for more information.

Water Conservation: Our water resources are not unlimited – they are affected everyday by precipitation, population growth, economic development and pollution. The most cost-effective way to protect your water resources is through conservation. For more information on water usage and conservation practices, please contact the Cumberland Engineering Division at 301-759-6604. Visit <http://www.epa.gov/watersense/> for water conservation tips, facts, information, and online activities for you and your family.

2016 Water Quality Data Chart

Regulated Parameters	Units	Cumberland Water Filtration Plant	Ideal Goals (EPA's MCLG)	Highest Level Allowed (EPA's MCL)	Typical Sources of Contaminant
Turbidity (max. monthly avg.)	NTU	0.04	N/A	TT	Soil run-off
Turbidity (max. reported)	NTU	0.08	N/A	1.0	
Total Coliform Bacteria	P/A	A	0	*	Naturally present in the environment
Barium	ppm	0.033	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrate	ppm	0.38	10	10	Runoff from fertilizer use, leaching from septic tanks, sewage; erosion of natural deposits
Gross Alpha (2015)	pCi/L	2.96	0	15	Erosion of natural deposits
Ethylene Dibromide	ppt	10	0	50	Discharge from petroleum refineries
Total Organic Carbon	N/A	met TT **	N/A	TT	Naturally occurring in the environment
**Total Organic Carbon Treatment Technique (TT) compliance was achieved through a waiver obtained from Maryland Department of the Environment and Pennsylvania Department of Environmental Protection. As per CFR 141.135(a)(2) an alternative Step 2 TOC removal requirement was provided in consistency with all other National Primary Drinking Water Regulations.					
Maryland Distribution System					
Chloramines (avg)	ppm	1.9	MRDL 4	MRDL 4	Water additive used to control microbes
Chloramines (range)	ppm	1.5-2.3	MRDL 4	MRDL 4	
Fluoride	ppm	0.2	4	4.0	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Copper (2014)	ppm	0.19	1.3	1.3 (AL)	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead (2014)	ppb	0	0	15 (AL)	
Total Trihalomethanes (avg)	ppb	43	N/A	80	By-product of drinking water disinfection
Total Trihalomethanes (LRAA)	ppb	43			
Total Trihalomethanes (range)	ppb	24 - 58			
Haloacetic Acids (avg)	ppb	42	N/A	60	By-product of drinking water disinfection
Haloacetic Acids (LRAA)	ppb	42			
Haloacetic Acids (range)	ppb	9 - 55			
Pennsylvania Distribution System					
Chloramines (avg)	ppm	2.6	MRDL 4	MRDL 4	Water additive used to control microbes
Chloramines (range)	ppm	2.2-2.9	MRDL 4	MRDL 4	
Fluoride (average)	ppm	0.60	4	4.0	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Fluoride (max reported)	ppm	1.06	4	4.0	
Copper (2016)	ppm	0.0879	1.3	1.3 (AL)	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead (2016)	ppb	0.00283	0	15 (AL)	
Total Trihalomethanes (avg)	ppb	39	N/A	80	By-product of drinking water disinfection
Haloacetic Acids (avg)	ppb	53	N/A	60	
Unregulated Parameters - Maryland & Pennsylvania					
pH (range)	S.U.	7.19 - 7.64	N/A	N/A	Naturally occurring in the environment
Hardness	ppm	98	N/A	N/A	
Sodium	ppm	5.0	N/A	N/A	

DEFINITIONS
Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using best available treatment technology
Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety
Maximum Residual Disinfectant Level (MRDL) - Set by the USEPA - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLs do not reflect the benefits of the use of disinfectants to control microbial contaminants
Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow
Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water
Waiver, Variance, or Exception - State or EPA permission not to meet an MCL or a treatment technique under certain conditions
NTU - Nephelometric Turbidity
pCi/L - Picocuries per liter (a measure of radioactivity)
ppb - Parts per billion
ppm - Parts per million
P/A - Presence/Absence
S.U. - Standard Units
LRAA - Locational running annual average
NA - Not Applicable
*Not more than one (1) positive sample if less than 40 samples collected

General Drinking Water Information: Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. See the **2016 Water Quality Data Chart** that summarizes water testing results for the 2016 calendar year.

Additional Information Regarding Lead: In 1992 EPA created new standards for acceptable levels of lead and copper in drinking water. Elevated levels of lead can cause

serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing.

The City of Cumberland – Utilities Division is responsible for providing high quality drinking water, but cannot control the variety of materials used in home plumbing components. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

FOR MORE INFORMATION OR QUESTIONS: Please contact the City of Cumberland's Environmental Specialist at 301.759.6604 for additional information regarding this report. This information is also available at the City of Cumberland's web site at www.ci.cumberland.md.us.

Other water distribution systems in your area include:
 LaVale Sanitary Commission at 301-729-1638
 Allegany County Sanitary District at 301-777-5942

This Water Quality Report is also available at anytime via the web-link: <http://tinyurl.com/cpshwod>